networks, and the stations---to be owned and operated by one party (the networks). But it is also possible for the networks to contract backward with producers and forward with stations. And it is also possible for stations to contract (with the aid of syndicators) with producers.

Although the off-network restriction makes off-network syndicated programming available to independent stations on preferred terms during the access period, it does not in our assessment yield contracting benefits (see subsection (B) below). By contrast, we ascribe diversity benefits to the contractual relations that obtain between the affiliate and producers by reason of the network restriction during the access hour (see subsection (C) below).

We consider the possibility that recent vertical developments in the broadcast industry are motivated by efficiency. In particular, the trend toward increasing vertical control could have production and transactional efficiencies. Upon closer examination, however, we fail to find such efficiencies, and instead once again find reasons to preserve the network restriction so as to counteract forces that work to harm program diversity.

A. Tradeoff Between Network Broadcasting and Local Interests

Large fixed costs of program development---combined with the formidable economies of simultaneous, nationwide delivery without the need to contract to sell each series in each geographic market---make network distribution an extremely cost-effective means of video delivery. In addition, networks can economize on the transaction costs by spreading the cost of programming, and affiliate and advertiser relations, over large amounts of programming.

The powerful economies of network broadcasting, however, need to be examined in relation to variations in local viewing tastes across the country. Tastes depart from the national

average because of characteristics of the local population plus their preference for local news, sports and public affairs. The first of these differences diminish with the relentless expansion in the number and variety of programs offered by other video sources since the expanded fare will more closely approximate a wider range of viewer preferences. Tension will persist, however, leaving the network-affiliate relationship to resolve programming differences.

While the network-affiliate relationship suffers from some inherent conflicts, networks and stations have much to gain from their considerable mutual interests. Access to a network's high-quality programming can differentiate a station's offering from competitors in its community. A station's coverage, especially in large metropolitan markets, delivers the audience necessary for a network to attract national advertisers.

Mutual benefits from the network-affiliate relationship are secured through cooperation. By pooling their information and resources, networks and affiliates can improve the selection of programming and schedules, and reduce the cost of soliciting advertisers. The benefits of this coordination are promoted by multiple-year agreements in which the parties perfect their mutual interests.

B. The Off-Network Restriction

We examine the off-network restriction in three parts: (1) the main effects, (2) indirect investment effects, and (3) contractual effects. Intertemporal differences in the main effects are crucial to our argument.

1. The main effects

It is clear that the off-network restriction has favored independent stations: "By precluding network affiliates from showing programs in the access period, PTAR ... effectively creates a supply of popular off-network programming (typically 'reruns') for purchase by independent stations; these programs typically generate high revenues for those stations" (NPRM, ¶9). The NPRM goes on to note that PTAR thus created "an advantage for independent stations and affiliates of new networks who were not subject to the same restrictions" (NPRM, ¶14).

One arguable purpose of the off-network restriction, therefore, is that it has made it easier for new networks to be organized by encouraging the entry of independent stations by increasing their profitability. The off-network restriction also tends to favor emerging networks, especially those with access to sources of prime-time programming.

Based on the success of Fox and the emergence of several other new networks, this purpose of the off-network restriction has been achieved. In the case of Fox, provided it stays below the 15-hour programming ceiling, it can sell off-Fox programming to any station (including its own affiliates). In particular, Fox can sell its programming to the traditional networks' affiliates in the top 50 markets free of competition from off-network programs.

A second purpose of the off-network restriction was to create a robust first-run syndication sector by "carving out a time slot" and artificially increasing the demand for such programming (NPRM, ¶¶31,34). This purpose, too, has been accomplished given the evidence presented in section II. But as we argued in Section III, the limited rationale for government protection of first-run syndicators and independent stations is an infant industry argument that

has expired by 1995.

Accordingly, for some time now, the effect of protection afforded by the off-network restriction has been to re-distribute profits to first-run syndicators and independent stations at the expense of affiliates of the major networks and producers of prime-time network programming.

2. Indirect investment effects

PTAR's off-network restriction interferes with the smooth functioning of the network-affiliate relationship. As a result, eliminating the off-network restriction will tend to lower the overall cost of network broadcasting, and to encourage investment in prime-time programming.

Prevented from exhibiting off-network programs, and with the network restriction in place, an affiliate must either make investments to produce programs itself, or it must purchase first-run programs from syndicators. In the latter case the affiliate bears the cost of establishing additional relationships with syndicators and independent programmers. Either way, it bears the added risk of how first-run programming will perform relative to programs previously "tested" on network broadcast. The upshot is that removal of the off-network restriction should result in lower costs of programming and advertising, and imply a larger pie to be shared among networks and affiliates.

The off-network restriction will also distort production decisions governing network programming. Television programming is a durable good, and like any durable good, restrictions on its future availability and uses will reduce the value of this asset.[37] By shrinking

[37] It is possible that viewers could shift all their viewing to the network run if they do not have access to the series through off-network. In that case, all (advertising) revenue of a program could be captured at the time of network exhibition. In fact, however, audiences do not view network and off-network broadcasts as perfect substitutes. Furthermore, there is evidence that complementarities arise between simultaneous network broadcast

the secondary market, the off-network restriction will induce networks to scale back on the quantity of programming they purchase. This will result in fewer episodes of each series. In some cases, unable to justify the incremental expenditure, programmers will choose not to produce the additional episodes necessary for a series to qualify for syndication.[38]

Another likely effect of eliminating the off-network restriction is to increase the quality of prime-time series. To see this, we adopt the conventional measure of program quality: the per-episode production cost of a series. Then, for a given quantity of prime-time programming, we would expect that a series' incremental advertising revenue from an increase in quality will increase when the size of its audience increases.[39] The incremental cost of that quality increase, however, remains unchanged. Consequently, programmers will spend more on program quality when the off-network restriction is eliminated and audiences for off-network programming expand.

Finally, elimination of the off-network restriction will allow viewers to enjoy off-network programming not only on network affiliates but on any station. At present, many communities in the top 50 markets have no more than one or two independent stations which is too few to accommodate the potential flow of off-network programming into the access period.

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and broadcast of off-network episodes, further adding to a program's value. Consequently, restrictions on off-network exhibition will reduce the expected, present discounted value of a series' revenue stream.

[38] Typically, a minimum of 80-100 episodes is needed for a series to succeed in syndication. The reason is that an off-network series is usually "stripped," i.e., shown five days a week in the same time slot.

[39] Owen and Wildman (1992), pp. 145-146.

3. Contractual effects

As discussed in Section V.C below, the network restriction takes the network out of the loop, so to speak, for purposes of programming the access period. The affiliates need either to produce their own programming or to contract with syndicators to secure programming for that hour. Because we ascribe source diversity benefits to the autonomy enjoyed by the affiliates during the access period, we counsel against terminating the network restriction at this time.

That argument assumes, however, that choice-autonomy will continue if the off-network restriction is terminated. Specifically, we assume that the effect of removing the off-network restriction is to place the affiliates on a parity with the independents for purposes of registering demands for off-network programming. If, however, the networks are allowed to program the access period with off-network programs, then our parity assumption would no longer hold. In that event, some of the autonomy benefits that we ascribe to a continuation of the network restriction would be sacrificed.

As the networks acquire financial interests in network programming, they will have greater incentive to place off-network programming into the access period. That could be done directly, but it is our understanding that the network restriction prohibits the networks from placing any kind of programming---including off-network programming---into the network feed during the access period. It could also be done indirectly, by "urging" the affiliates to purchase programs in which the network holds a financial interest, perhaps using the sales force of their syndication arms (assuming the syndication restriction is permitted to expire).

Thus, although we do not identify any direct source diversity benefits to the off-network restriction, we recognize that some substitution of off-network for other programs could occur

if the off-network restriction is lifted. We register concern if this substitution takes an involuntary (off-network programs forced upon affiliates) rather than a voluntary (off-network programs chosen by the affiliates) form. Especially when locally and independently produced programs are displaced, source diversity benefits are lost. Involuntary substitution is tantamount to a hierarchical override, which is precisely the issue that our analysis in Section V.C addresses.

For these reasons, should the Commission retain the network restriction while repealing the off-network restriction, we urge it to be vigilant of possible evasions of the network restriction. At a minimum, the Commission should indicate that the purpose of the network restriction is to support affiliate autonomy during the access period and advise that such autonomy should not be compromised.

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In sum, a contractual effect of the off-network restriction is to limit the options of affiliated stations in the top-50 markets to satisfy their viewers' preferences. This limitation, in turn, raises the cost of network broadcasting and reduces incentives to produce high-quality prime-time series. A related effect is that the restriction has redistributional benefits for independent stations and first-run syndicators. Absent evidence of viewer benefits and a display of net gains, such outcomes are not consonant with the FCC's public interest mandate, as expressed in the NPRM (see Section III above). While PTAR may have once served a legitimate purpose by protecting first-run syndicated programmers and independent television stations (as discussed in Section IV), these sectors have reached maturity. The marginal private benefits of further protection are negligible at best, and come at a social cost to viewers.

Clearly, any justification for retaining the off-network restriction has expired.

C. The Network Restriction

The putative purpose of the network restriction was to promote greater diversity in programming. The logic for that purpose has never been worked through, however. We advance a contractual interpretation.

A second possible purpose of the network restriction is that it solved a collective action problem faced by the networks in 1970. That issue was recognized and briefly addressed by the Network Inquiry (1980).

Those purposes notwithstanding, the network restriction stands as a barrier to the best use of the access period by the networks. If local programming will be improved by relieving the affiliates of the off-network restrictions, we must ask: why doesn't a similar logic dictate that global (i.e., nationwide) programming will be improved by relieving the networks of the network restriction? We consider each of these issues beginning with collective action.

1. The network restriction may enable beneficial coordination of access period programming

The affiliates are too small and too unorganized to resist the networks' attempt to program the access hour. Because they are unable to preempt the "network feed," affiliates may be incapable of collective action. In fact, PTAR may assist affiliates in realizing the possible benefits from coordination as was described in the Network Inquiry (1980, p.254):

> "Many affiliated stations profess to be happy with the Rule, which presumably means that their profits are higher with the Rule than without it. But

since each station previously had the option of not clearing network programs whenever it was not in their interests to do so yet accepted most network programs during prime time, it is not obvious why they benefitted from the Prime Time Access Rule. One answer may be related to the fact that the profitability from carrying a given program is closely related to which programs are being carried by competing stations. The carriage of non-network programs may be more profitable for affiliates than clearance of network programs only when other affiliates in the market are also carrying non-network programs. But no station will choose the non-network alternative because it cannot be sure that its competitors will do likewise. Only if all affiliates agree to carry non-network programs would it be in the interest of each to do so. While such arrangements are illegal, and hard to enforce in any event, the Prime Time Access Rule makes such collusion unnecessary.

"Moreover, higher station profits do not necessarily occur at the expense of the networks since they too may be helped by the Prime Time Access Rule. It may not be profitable for each network to offer programs during the entire prime time period so long as other networks are not doing so. However, a network might have to offer a full line-up if other networks did and if audiences for later programs are determined in part by the audiences of the programs which precede them. While each network might prefer a situation whereby all networks agreed not to offer a full line-up during prime time, each will find it profitable to offer a full line-up in the absence of such an agreement. Once again, the Prime Time Access Rule makes such an agreement unnecessary to achieve the desired result."

A straight-forward interpretation of this is that there are system benefits to affiliates and, possibly, to the networks of freeing up the access period. That is because the PTAR rule overcomes the difficulties of orchestrating collective action benefits. The number of affiliates being great, they are unable to act collectively without assistance. After all, preemption of other prime-time programming is extremely rare.[40]

While cooperation among competitors is often regarded as conspiratorial and

[40] Even in other dayparts, preemption remains the exception rather than the rule.

anticompetitive, it can have beneficial effects.[41] In the case of PTAR, we do not see how the networks would realize monopoly power by opening up the access period. Rather, the unprofitability to which the Network Inquiry refers reflects a lack of audience to support cost-effective network programming. The appearance of regulation, in the form of the access period, can thus be interpreted as an efficiency gain to both stations and networks. It "solves" the collective action problems of both.

Social gains would be assured if viewers also realized benefits from collective action. Viewer benefits are likely to take the form of improved program diversity. In absence of the network restriction, networks will be inclined to program the access period in their competition for national advertisers and their desires to spread their sales costs. Affiliates will be unable to resist network pressure to accept network programming (see Section V.C.3). In the end, the programming presented during the access period will be specifically designed to attract national advertisers, and not satisfy local tastes. In particular, programming produced locally for the access period will be displaced.

2. Hierarchical production stifles program diversity

In principle, a less constrained system is always superior to a system with more constraints. That is because the less constrained system can always do as well as the more constrained system by replicating the constraints where these are cost-effective; and it can do better than the constrained system wherever the constraints get in the way of superior

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[41] As an example, consumers greatly benefit when manufacturers jointly decide on the technical standards on which to base their product designs. In absence of such coordination, consumers may be deprived of a wide array of interchangeable components, and instead, be forced to choose among incompatible proprietary standards.

performance. The combination of replication with selective intervention is thus always better than a continuously constrained system.

Selective intervention--which entails intervening always but only when net gains to the system can be projected--is a beguiling solution but often suffers from being a hypothetical ideal rather than a feasible alternative. Thus consider two alternative ways of procuring a good or service. One of these is for both parties to be independent and to operate by contract. The second is for one party to acquire the other and operate "selectively" by hierarchy.

Assume, in particular, that the firm that acquires another firm tells that firm that its incentives will remain the same and that the only change is that the buyer will take on responsibility for the combined enterprise if and only if the two stages get out of alignment--which sometimes happens when they are independent. Were it that the combined firm could replicate everything that the autonomous parts could do when things worked well, and could furthermore intervene selectively when things went poorly, then the combined firm would never do worse (through replication) and would sometimes do better (through selective intervention). If that program could be implemented, hierarchy would always beat contracting.

In fact, that program cannot be implemented because "promises" to exercise discretion only for good causes are not self-enforcing. Instead, the lead firm will sometimes intervene for efficiency purposes (which is good), but at other times it will intervene to effect a redistribution of wealth. The latter gives rise to incentive degradation and invites strategic investment and behavior of an inefficient kind. The hierarchical firm lacks a "credible commitment" not to intervene so as to redistribute wealth in its favor. The degradation of incentives in hierarchies, moreover, has a further effect: hierarchies experience greater bureaucratic costs. In particular,

hierarchies are susceptible to "bureaucratic barnacles" that impair their functioning. Below, we examine in detail these two features of hierarchical production---lack of credible commitments and bureaucratic barnacles---that impair efficiency of network television program production and distribution.

(i) credible commitments Suppose that the networks perceive that there has been value added by the greater autonomy that has accrued to the affiliates during the access period under PTAR. They could attempt to preserve that value by self-imposing the access period. Or they could attempt to realize that value and add more by the device of selective intervention. As between the two, the former is the less demanding. Both, however, pose credibility problems.

The problem with voluntary restraints is just that: they are voluntary. What is given can be withdrawn. Out of an awareness of that a voluntary access period is problematic, affiliates will be less willing to make the same durable, specialized investments than they would in a regulatory regime (where the restraint applies with greater assurance). For instance, affiliates may be unwilling to make large investments in local news programming facilities used to produce news shows for the access hour without assurances that the networks would not take back that time period.

Even if a voluntary access period is "observed," moreover, the fact that the networks could unilaterally change the PTAR puts the networks in a stronger bargaining position for dividing the current surplus. With the lurking threat that PTAR will be changed if the network does not get a "better" division of the pie, where a change in the division could be accomplished not by making direct claims on the net receipts earned during the access period but by making other adjustments (e.g., by reducing the "network compensation rate" for programs in other

dayparts), the affiliates will accede.

The specific mechanism by which the network increases its claims against combined net receipts is beside the point. What is critical is that affiliates who perceive that their claims against net receipts in a "voluntary PTAR" world are weaker than they are under an involuntary (FCC imposed) PTAR will behave differently. Out of concern that the benefits to their investments in better programming and to cost containment leak out, affiliates will cut back on both.

A voluntary PTAR program in which the networks are granted the option of waiving PTAR when circumstances warrant (i.e., voluntary PTAR combined with selective intervention) poses all of these same leakage problems and more. Networks may wish to promise to intervene if and only if there are net gains. But since such a promise is unenforceable, it will not be believed.

The upshot is that the degree of credible autonomy that the affiliate realizes under regulatory PTAR is compromised by a voluntary PTAR. Since regulatory PTAR is the source of productive human and physical capital investments that yield more and better program diversity (as discussed below), that diversity will be placed in jeopardy by terminating the regulatory PTAR network restriction.

Thus producers who were willing to enter and innovate under PTAR, because they perceived a reliable demand for their programming, will perceive that there are added hazards if the PTAR network restriction is terminated. One of these hazards is that the networks may do more of their own production. More troublesome is that the networks will alter the rules of the game to the disadvantage of the independents. A whole variety of programming and

bargaining changes that impair the incentives of the independent producers could materialize.

(ii) bureaucratic barnacles The barnacles that accrue to more hierarchical forms of organization are commonly ignored by economists, but that does not make them any the less real. Because, however, the incentive disabilities and bureaucratic propensities of hierarchy are little studied and poorly understood, they tend to be undervalued.

The issues here relate to the incentive and control issues that are pertinent to the matter of credible commitment (see above) but go beyond this to introduce the idea that internal organization, like regulation, has a life of its own. Among the more important intertemporal effects of internal (bureaucratic) organization, as compared with interfirm contracting, are (1) the propensity of managers to manage, (2) the differential propensity to defend mistakes (within as compared to between organizations), and (3) the differential opportunities to politic. These give rise to added costs within internal organization and have the general effect of suppressing variety. Diversity is squeezed out as a consequence.[42]

To be sure, the degree to which managers are able to give vent to their bureaucratic predilections varies with the condition of competition in product and capital markets. Plainly, competition of both kinds has increased in the television industry between 1970 and 1995. The fact, however, that producers speak to the differences between producing network programs in-house and producing them independently speaks to the continuing propensity of the networks to manage diversity in a way that limits incentives and innovation.

The social costs of hierarchy have been demonstrated in other contexts. For instance, it has long been observed that R&D by small firms is more productive than R&D by large firms

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[42] These arguments are elaborated in Chapter 6 of Williamson (1985). See also Zenger (1994) (pp. 708-713).

based on several measures.[43] In part, reduced innovativeness can be traced back to disabilities in the size of large corporations to reward creative efforts. In particular, small companies are better able to offer research personnel performance-related compensation packages than do large companies.[44]

Another example of the propensity of large firms to exercise management control over activities that are better left to the market is afforded by procurement practices in the U.S. automobile industry. But for the challenge of Japanese competition, American firms would have been content to continue to produce many automobile parts that could be procured more efficiently from independent parts suppliers. The record reveals that Japanese automobile firms made significant inroads into the U.S. market during the 1980s. Much more extensive subcontracting was one of the factors that was responsible for the Japanese cost advantage.[45]

Faced with the need to get their own costs under control, American auto companies have found that they too could subcontract more effectively. Bureaucratic predilections to favor in-house procurement and hierarchical controls notwithstanding, the U.S. firms rediscovered the cost saving and innovative benefits of market procurement. More competitive U.S. automobile manufacturing has resulted.

Indeed, the experience in contracting for parts in the household appliance and aircraft industries is similar. Subcontractors that were previously "given a specification and monitored"

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[43] See Scherer (1984), Chapter 11.

[44] Zenger (1994).

[45] See Asanuma (1988). Typical was General Motors' dependence on a highly vertically integrated form with hundreds of contractors who bid against one another to supply small parts. In contrast, Toyota awards contracts to a few suppliers of large subassemblies based on their past performance. See Milgrom and Roberts (1992), pp. 310-11.

under the old hierarchical system are now awarded greater latitude to design parts.[46] To be sure, more latitude is not always better than less. Within limits, however, engineering and developmental benefits are ascribed to these less hierarchical modes of contracting. Contracting modes that better support source diversity in the television industry are thus to be valued.

3. Network control of the access period compromises affiliate autonomy

Even if the network restriction is responsible for diversity benefits, these benefits must be examined in relation to the loss of network control over the entire prime time period. The benefits of network control go to the very essence of the network concept.

Also pertinent is the fact that contracts between the networks and the affiliates, in conformance with FCC rules, provide opportunities for the affiliates, at least in theory, to substitute their own programming judgment for that of the networks. The removal of the network restriction does not, therefore, necessarily imply network control over the (former) access period. The affiliates, again in theory, may decide to program that hour themselves.

The facts, however, disclose that the *de jure* contractual rights of the affiliates are difficult to exercise. For one thing, an affiliate may need to plan far in advance to do this. Second, the network may place quantitative limits and lay down costly procedures for opting out. Indeed, there is evidence that the networks are often insistent on having the affiliate accept the network feed, de jure rights to the contrary notwithstanding. Note in this connection that even if the affiliate has the contractual right to opt out, if the exercise of this right is known to be disfavored by the network, and if the network has access to many instruments (some of them

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[46] "Working Together: Manufacturers Use Suppliers to Help Them Develop New Products," Wall Street Journal, December 19, 1994, p.A1.

very indirect), then the affiliate may be deterred for this reason.

Ideally, of course, the system will allocate programming responsibility to the parties in such a way as to maximize the combined net receipts. If, however, the disposition of net receipts varies in favor of the party that originates the programming -- in that the network has no direct claims against the net receipts of affiliate-originated programming (but can get at these by indirection), whereas the allocations under network-originated programming is done according to formula -- then the network may decide to program periods for which the affiliate could actually earn greater net receipts. Resulting inefficiencies will persist if bargaining to a superior result is costly and/or contrary to the spirit of the network-affiliate relationship. (What this comes down to is that the networks may prefer a smaller pie if they get a bigger share.)

The network restriction is a way of giving teeth to the affiliates' "rights" to exercise programming judgment. Since the network restriction is already in place, applies to only one hour per day, has potential collective action benefits, and serves the Commission's diversity purposes by encouraging non-hierarchical production, we recommend that it be retained at this time.

4. Structural trends may foreclose independent programmers

The network restriction needs, of course, to be examined in relation to recent and prospective changes underway in the television industry. Recent moves toward vertical integration, vertical alliances and exclusive relationships are pertinent in this connection. In Section II, we documented how the television industry has become progressively more "Balkanized," shrinking the amount of business open for bid by unintegrated firms. Independent

programmers and first-run syndicators can be marginalized in the process.

There are several explanations for this substitution of integrated operations and exclusive sales relationships for market procurement: (1) technical change, (2) regulatory change, (3) market power, and (4) "land rush" considerations.

First, a technical advance could justify greater integration in the production and distribution of video media, or a new management technique could economize on transaction costs. We have not been able to uncover evidence supporting these possibilities. Nor have we been able to identify any technical developments that would make investments more vulnerable to opportunism, thereby justifying unified ownership.

A second possible explanation is found in changes in television regulation. In particular, the repeal of much of the Financial Interest and Syndication Rules, including the restriction on network ownership of financial interests in programs, paves the way for networks to integrate backward into program ownership. However, it does not automatically imply that it is efficient for networks to acquire program producers or to expand their in-house operations. Furthermore, the demise of the financial interest rule fails to explain the observed downstream expansion into local broadcasting, so we must look elsewhere.

A common explanation for vertical integration is as a means by which a firm exercises market power. According to the usual foreclosure story, by vertically integrating and removing its transactions from the active market, a firm increases the market share of its unintegrated rivals, and hence, their market power. They are then able to raise prices, and in so doing, to raise profits of the integrated firm. In order to have such an effect in the television industry, a firm would have to make an enormous acquisition of programmers and broadcast stations. At

the moment, given the many alternative sources of programming and the many outlets for broadcasts, it is unlikely that any one firm will be able to amass such market power.

Instead, what appears to be happening is that the vertical control is the outcome of a race for essential programming resources and distribution outlets. Programming resources, including film archives and experienced programming talent---writers, directors, producers and actors---as well as production companies, are available in fixed supply over the near term. The FCC has also reached the limit on the allotment of broadcast licenses, given current technology, and cable systems are bumping up against capacity limits on their coaxial networks.

The "land rush" for these resources has increased with the emergence of new networks, the growth of cable, and the prospect of yet-unknown multimedia services. The new networks are leading the race to acquire these resources.[47] In response, established firms in the television industry see their survival dependent on securing these essential resources. To protect their future, they are compelled to preempt other firms from acquiring these resources ahead of them. Failing to do so severely undermines the value of assets that they have dedicated to this industry.

Land rush does not constitute a counteracting efficiency argument, but instead could foreclose unintegrated producers and deter entry by innovative firms. First, unaligned firms experience diminished opportunities for transacting,[48] creating an incentive for them to align

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[47] In describing UPN's development, chairman of Paramount Television Group, Kerry McCluggage, stated: "Our strategy was to sign up independents in markets where there was a single viable alternative. Every station that we won, that was a market that Warner was effectively locked out of in terms of a broadcast base." See "Anxious parents await the birth of a TV network," New York Times, January 15, 1995, Sec. 2, p. 1.

[48] After PTAR was implemented, syndicators sold programs free of competition into the 6 access hours. (Although PTAR applies seven days per week, the networks air programs on Sunday night that are exempt from the rule's restrictions.) In addition, at that time they could sell programming for the full 28 prime-time hours then available on 82 independent stations in the top 50 markets (NPRM, ¶16). Today, without the network restriction,

with networks. This incentive may be overwhelming because individual programmers and independent stations are simply too small and unorganized to refuse such offers.[49] Second, potential entrants into programming and broadcasting will find it more difficult to start up a business in a world of greater vertical integration and exclusive relationships. Starting off at a relatively small scale, an entrant cannot achieve the economies necessary to compete with an incumbent on price, especially if it produces a very close substitute.[50]

Both foreclosure of unintegrated producers and deterrence of new producers can harm program diversity, either by reducing the amount of programming available or by suppressing innovative products. Economic theory suggests that entrants will tend to enter with products that are superior to current offerings, or at least differentiated from them. In this way, entrants are able to attract viewers and advertisers away from incumbents by offering a segment of the population a preferred product. Empirical evidence confirms that entrants tend to be more "innovative" than established firms.[51] Furthermore, threatened by entry, incumbent firms are spurred on to be more innovative themselves.[52]

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independents would have to overcome the network advantage in order to place programming in the access period. What would then remain is prime time on a mere 11 "pure" independent stations, plus 18 hours of unprogrammed prime time on UPN and 20 hours on WB. This reduction in distribution possibilities will force independents to exit or produce a different product for cable television.

[49] "Why would a dealer sign a contract that lowers the probability of entry and lessens competition among suppliers? If there are many dealers, the answer is clear: each one may think that his individual signing decision has no effect on the likelihood of entry, and that actions by other dealers will block entry completely." Katz (1989), p. 708.

[50] "In the presence of staggered (long-term) contracts, the entrant is able to compete for only a small portion of the total business at any one time. Given the large fixed costs of entry, it may not be profitable to go after demand in bits and pieces." Katz (1989), pp. 707-708.

[51] Geroski (1991), Chapter 6, "Entry, Technical Progress, Efficiency and Productivity."

[52] See, for example, Gilbert and Newbery (1982).

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Conceivably, efficiency is responsible for the vertical re-structuring taking place in the television industry. If, however, the industry is undergoing a land rush, then efficiency may be harmed as resources are being consumed in the process of redistributing property rights. It is all the more imperative, therefore, that non-hierarchical contracting alternatives be preserved in the interests of program diversity. Awaiting a demonstration that efficiency effects of an undisclosed kind offset the diversity benefits that we ascribe to the network restriction, we recommend that the restriction be maintained for the present and examined at a later time in the light of subsequent developments.

VI. POLICY ASSESSMENT

Since PTAR was adopted in 1970, the television industry has experienced growing competition for audiences and for advertising dollars. This competition seriously undermines any efficiency rationale for PTAR. In particular, neither of the two restrictions is justified by an infant industry argument. Not only has the argument long since expired, but the first-run syndication business and independent stations are now mature and thriving. Moreover, the off-network restriction does not appear to repair any contractual failure that may arise between networks and their affiliates. By contrast, we find that the network restriction serves the Commission's program diversity objective by encouraging non-hierarchical production and counteracting tendencies toward market foreclosure.

We therefore recommend that the off-network restriction should be eliminated immediately. We attribute continuing contractual benefits to the network restriction, however,

and therefore recommend that it be retained for the time being. Accordingly, we believe that the FCC had the order right in one of the potential transition mechanisms to which it refers---namely, "repeal of the off-network restriction followed by later repeal of the remainder of the rule."[53] As there is little doubt in our minds that entry and technical change in this industry will continue, the contractual benefits of the network restriction should be reviewed in the future in light of those changes.

We defer to the Commission as to the best timetable on which to revisit the network restriction. We caution against scheduling a review before the ongoing trends in both horizontal competition and vertical re-structuring have had the opportunity to play out. Nor should such review occur so soon (or so often) as to seriously undermine the incentives for networks, programmers and stations to make efficient long-run business plans.

REFERENCES

Banri Asanuma, "Japanese manufacturer-supplier relationships in international perspective: the automobile case," Kyoto University, Working Paper 8, 1988.

Marver Bernstein, Regulating Business by Independent Regulatory Commission. Princeton: Princeton University Press, 1955.

Paul Geroski, Market Dynamics and Entry, Oxford: Basil Blackwell, 1991.

Richard Gilbert and David Newbery, "Preemptive patenting and the persistence of monopoly," American Economic Review, 1982.

Gene Grossman, "Promoting new industrial activities: a survey of recent arguments and evidence," OECD Economic Studies, Spring 1990.

Michael Katz, "Vertical contractual relations," in Handbook of Industrial Organization, Richard

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[53] NPRM, ¶62.

Schmalensee and Robert Willig, editors, New York: Elsevier Science Publishers, 1989.

Paul Milgrom and John Roberts, Economics, Organization and Management, Englewood Cliffs: Prentice-Hall, 1992.

Network Inquiry Special Staff, New Television Networks: Entry, Jurisdiction, Ownership and Regulation, Federal Communications Commission, 1980.

Bruce Owen and Steven Wildman, Video Economics, Cambridge: Harvard University Press, 1992.

Frederick Scherer, Innovation and Growth, Second Edition, Cambridge: MIT Press, 1984.

Donald Turner, "Conglomerate Mergers and Section 7 of the Clayton Act," Harvard Law Review, 78 (May 1965), 1313-1395.

Oliver Williamson, The Economic Institutions of Capitalism: Firms, Markets and Relational Contracting, New York: Free Press, 1985.

Todd Zenger, "Explaining organizational diseconomies of scale in R&D," Management Science, 40:6, pp. 708-722, June 1994.

CURRICULUM VITAE OF
OLIVER E. WILLIAMSON

PERSONAL — September 1994

NAME: Oliver E. Williamson

BORN: September 27, 1932 in Superior, Wisconsin 54880

MARRIED: Dolores Celeni, 1957;

CHILDREN: Scott R. (b. 1958),
Tamara E. (b. 1959),
Karen L. (b. 1961),
Oliver E., Jr. and Dean V. (b. 1967)

PRESENT POSITION

Edgar F. Kaiser Professor of Business Administration, Professor of Economics, Professor of Law, University of California, Berkeley, 1988- .

EDUCATION

S.B., Massachusetts Institute of Technology, 1955.

M.B.A., Stanford University, 1960.

Ph.D., Carnegie-Mellon University (Economics), 1963.

AWARDS AND FELLOWSHIPS

Member, National Academy of Sciences, 1994- .

Senior Research Fellow, Institute for Policy Reform, 1990- .

Doctoris Honoris Causa in Economic Science, Groningen University, 1989.

Irwin Award for Scholarly Contributions to Management, Academy of Management, 1988.

Doctoris Honoris Causa in Economic Science, Hochschule St. Gallen, 1987.

AWARDS AND FELLOWSHIPS (continued)

Distinguished Senior U.S. Scientist Award, Alexander von Humboldt-Stiftung, 1987.

Oeconomiae Doctorem Honoris Causa, Ph.D., Norwegian School of Economics and Business Administration, Jubilee Celebration, 1986.

1983 Prize for Distinguished Scholarship in Law and Economics, Miami University.

Fellow, American Academy of Arts and Sciences, 1983.

Fellow, Econometric Society, 1977.

Fellow, Center for Advanced Study in the Behavioral Sciences, 1977-78.

Guggenheim Fellow, 1977-78.

Ford Foundation Dissertation Prize, 1963.

Alexander Henderson Award for Excellence in Economic Theory, Carnegie-Mellon, 1962.

LECTURES AND SPECIAL VISITING APPOINTMENTS

Visiting Professor of Economics, Paris I (Sorbonne), May-June 1994.

Lecturer, Venice Summer School of Applied Social Sciences, Venice, Italy, September 1993.

Lecturer, University of the Air (Japan Open University), on "Economic Organization," as part of the TV program "A Study of Economic Civilization," October 1993.

Five Lectures on Transaction Cost Economics, Netherlands Graduate School of Economics, Maastricht, May 1993.

Distinguished Speaker, 10th Anniversary Speaker series, Graduate School of Management, University of California at Irvine, February 1991.

Kenneth Parsons Lecture on Institutional Economics, University of Wisconsin, Madison, September 1991.

Distinguished Economist Lecturer, New School for Social Research, April 1992.